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## Patent claims

- 1. Tank vent, comprising an oleophobic inorganic membrane surface-modified with perfluoroalkyl compound.
- 2. Device according to Claim 1, in which the inorganic membrane is a ceramic membrane.
- 3. Device according to Claim 1, in which the inorganic membrane is a metal membrane.
- 4. Device according to Claim 1, in which the inorganic membrane is surface-modified by silanization with perfluoroalkyl compounds.
- 5. Device according to Claim 1, in which the inorganic membrane is surface-modified by plasma coating with perfluoroalkyl compounds.
- 6. Device according to Claim 1, in which the inorganic membrane is surface-modified by painting with perfluoroalkyl compounds.
- 7. Device according to Claim 1, in which the inorganic membrane exhibits a pore size of 1 nm to 100  $\mu$ m.
- 8. Device according to Claim 1, in which the membrane additionally exhibits hydrophilic components in the surface matrix.
- 9. Device according to any of the preceding claims, in which the device is a venting system of a fuel system.
- 10. Vapor or solvent adsorber, comprising at least one

- oleophobic inorganic membrane characterized in Claims 1 to 8.
- 11. Device according to Claim 10, in which the device is a fuel adsorber.
- 12. Fuel adsorption section, comprising the fuel adsorber according to Claim 11.
- 13. Tank system, comprising the tank vent according to one of Claims 1 to 8 and/or the vapor or solvent adsorber according to Claim 10.
- 14. Use of the oleophobic inorganic membrane characterized in Claims 1 to 8 in the separation of vapor from liquid in a tank vent and/or before a vapor or solvent adsorber.
- 15. Use according to Claim 14, in which the tank vent is a venting system of a fuel system.
- 16. Use according to Claim 14, in which the vapor or solvent adsorber is a fuel adsorber.
- 17. Process for the separation of vapor from liquid in a tank vent and/or before a vapor or solvent adsorber, in which an oleophobic inorganic membrane characterized in Claims 1 to 8 is used in the tank vent or before the vapor or solvent adsorber.
- 18. Process according to Claim 17, in which the tank vent is a venting system of a fuel system.
- 19. Process according to Claim 17, in which the vapor or solvent adsorber is a fuel adsorber.